

# UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/674,444	10/31/2000	Symon Reuben Brewer	20251-000100	9030	
7590 11/19/2003			EXAM	EXAMINER	
	d Townsend And Crew		VARTANIAN, HARRY		
Denver, CO 8	1th Street Suite 2700 30202-5827		ART UNIT	PAPER NUMBER	
			2634	8	
			DATE MAILED: 11/19/2003		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/674,444	BREWER, SYMON REUBEN			
Office Action Summary	Examiner	Art Unit			
	Harry Vartanian	2634			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).  Status	36(a). In no event, however, may a reply be time within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1) Responsive to communication(s) filed on 31 Oc	<u>ctober 2000</u> .				
2a) This action is <b>FINAL</b> . 2b) ⊠ This a	action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
<ul> <li>4)  Claim(s) 1-15 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-3,10-12 and 15 is/are rejected.</li> <li>7)  Claim(s) 4-9,13 and 14 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>					
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on 31 October 2000 is/are:  Applicant may not request that any objection to the or Replacement drawing sheet(s) including the correction of the order	a) $\square$ accepted or b) $\square$ objected drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. §§ 119 and 120					
a) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list of the since a specific reference was included in the first 37 CFR 1.78.  a) The translation of the foreign language pro 14) Acknowledgment is made of a claim for domestic reference was included in the first sentence of the service of the service of the service was included in the first sentence of the service of the service was included in the first sentence of the service of the service was included in the first sentence of the service of the service was included in the first sentence of the service of the service was included in the first sentence of the service was included in the first sentence of the service was included in the first sentence of the service was included in the first sentence of the service was included in the first sentence of the service was included in the first sentence of the service was included in the service was include	s have been received. s have been received in Application ity documents have been received in Application (PCT Rule 17.2(a)). of the certified copies not received priority under 35 U.S.C. § 119(ast sentence of the specification or evisional application has been received priority under 35 U.S.C. §§ 120	on No  ed in this National Stage  ed.  e) (to a provisional application)  in an Application Data Sheet.  eived.  and/or 121 since a specific			
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal P	(PTO-413) Paper No(s) latent Application (PTO-152)			

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### **Detailed Action**

## Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 1. Claims 1, 2, 10, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Hamre(US Patent# 5,481,563). Regarding Claims 1, 10, and 15 Hamre discloses an "apparatus for determining the jitter profile of a serial data link that employs a self-clocking data signal."(Column 2, Lines 49-50) Regarding the limitation of the offsetting the reference clock, Hamre states "The recovered clock signal is used to establish a first sampling time for sampling the self-clocking data signal. A programmable delay means establishes a second sampling time to sample the self-clocking data signal and the resulting interval between the first and second sampling times are a function of a delay value signal applied to the programmable delay means." (Column 2, Lines 54-60) Furthermore, regarding error measurement Hamre discloses "the jitter profile measuring apparatus is a first circuit means for producing an induced error signal indicative of a difference of results when sampling the self-clocking data signal at the first sampling time and then at the second sampling time. A further circuit means is arranged to produce an error ratio signal indicative of the number or count of induced error signals within a defined interval. The

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error ratio signal is then compared with a predetermined error ratio value with the results of the comparison being used to control the delay value of the programmable delay means whereby the error ratio signal made to substantially correspond to the adjustable reference signal." (Column 2, lines 60 to Column 3, Lines 5)

Moreover, regarding the limitation of counting the number of error occurrences in Claims 1, 10, and 15. Hamre states that "In this manner counter 114 accumulates the number of errors induced during a given measurement interval." (Column 5, Lines 59-61)

Furthermore, the limitation of Claim 15 regarding the use of a detector is disclosed by Hamre in the use of "An error ratio detector circuit determines an error ratio which is compared to a predetermined reference." (Abstract) The limitation of Claim 15 regarding the use of a counter to track the number of errors is shown by Hamre in figure 4 and stated "In this manner counter 114 accumulates the number of errors induced during a given measurement interval." (Column 5, Lines 59-61) The limitation of Claim 15 regarding the use of an analyzer is shown in fig 4 item 116.

Regarding Claims 2 and 11, Hamre discloses a self-clocking data signal used for "clock recovery means for generating a recovered clock signal and a recovered data signal from the self-clocking data signal." (Column 2, Lines 52-55)

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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2. Claims 3 and 12 are rejected under 35 U.S.C. 103(a) as being anticipated by Hamre(US Patent# 5,481,563) in view of Georgiou et al (US Patent# 5,668,830). Hamre meets all the limitations of Claims 3 and 12, see above paragraphs, except for the smoothing of the reference clock before sampling.

However, Georgiou et al discloses "Sampling clock `sclk` is produced by a sampling clock phase adjuster circuit 30 which receives as input the reference clock signal and a shift sampling clock signal "SHIFT.sub.--SCLK". SHIFT.sub.-- SCLK is produced by a smoothing and selection logic circuit 26 in accordance with the present invention." (Column 7, Lines 2-10) Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that Hamre's jitter measurement method smooth the reference or sampling clock before measuring errors. The motivation for combining Hamre's method with Georgiou et al's is that smoothing of the signal improves the quality and precision of the locally generated clock therefor providing a more accurate jitter measurement.

### Claim Objections

3. Claims 4-9, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harry Vartanian whose telephone number is 703.305.8698. The examiner can normally be reached on 9-5:30 Mondays to Fridays.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 703.305.4714. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is NONE.

Harry Vartanian Examiner Art Unit 2634

HV

STEPHEN CHIN
DEBUGGRY PATENT FYAMI

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